

## Letters Needed NOW on Gas Drilling in the Delaware River Watershed!

You did it! Hundreds of letters were filed with the DRBC and many voices spoke up at DRBC Public Hearings for expanded public comment. DRBC extended the public comment period to April 15, 2011.

Now let's load the record up with evidence about why the DRBC Draft Natural Gas Regulations won't protect the Wild and Scenic Delaware River and the drinking water for 15 million people

## Why You Should Be Involved

What Happened: Despite a storm of protest the Delaware River Basin Commission (DRBC) prematurely issued draft natural gas development regulations for the Delaware River Watershed on Dec. 9, 2010. They were asked to wait until a cumulative impact analysis of natural gas development on the Basin's water resources to be completed. Also, the U.S. Environmental Protection Agency is studying hydraulic fracturing, the stimulation process that is used to access shale gas; the study of the potential impacts on drinking water, public health and the environment is due out in 2012. Further, New York State is reexamining its high volume hydraulic fracturing environmental study and has a ban in place through July 1, 2011. These scientific studies need to be done to inform DRBC regulations to prevent pollution and avoid degradation from gas development. Instead, the DRBC has fast tracked the process.

What's Up Now: It's clear the DRBC has jumped the gun because the draft regulations do not address cumulative impacts, do not set limits on gas development, do not institute high enough standards to protect streams and communities and rely heavily on flawed state regulations that are filled with exemptions and loopholes. The mandate of the DRBC is to prevent degradation of the exceptional water quality of the Delaware River but these proposed gas rules do not make drilling safe, will allow water resources to be depleted, water quality and ecosystems to degrade, and do not protect the water supply for 15 million people.

The draft rules are now open for public comment, the drillers want to start drilling as soon as the rules are adopted, breaking the present moratorium on drilling here. The DRBC's draft rules are available at <a href="http://www.state.nj.us/drbc/notice\_naturalgas-draftregs.htm">http://www.state.nj.us/drbc/notice\_naturalgas-draftregs.htm</a>. Comment can be submitted now electronically at <a href="http://parkplanning.nps.gov/projectHome.cfm?projectId=33467">http://parkplanning.nps.gov/projectHome.cfm?projectId=33467</a> You can also submit your comments by mail to: Commission Secretary, DRBC, 25 State Police Drive, P.O. Box 7360 West Trenton, NJ 08628-0360 (email and faxed comment will not be accepted).

Delaware Riverkeeper Network 300 Pond Street, Second Floor Bristol, PA 19007 tel: (215) 369-1188 fax: (215) 369-1181 drkn@delawarenverkeepenorg www.delawarenverkeepenorg To learn about what's happening with current gas development in Pennsylvania and elsewhere a MUST READ is the New York Times series:

Part 1: http://www.nytimes.com/2011/02/27/us/27gas.html? r=1&hp

Part 2: http://www.nytimes.com/2011/03/02/us/02gas.html? r=2&hp\

Part 3: http://www.nytimes.com/2011/03/04/us/04gas.html? r=3&pagewanted=1&ref=us

## Suggested Talking Points on the DRBC Draft Natural Gas Development Rules

- The DRBC is charged with a legal mandate to "Do No Harm" to the Special Protection Waters of the Delaware River. DRBC MUST maintain the exceptional water quality that now exists in the River and improve it where it needs help. These draft rules fall far short of meeting that high bar even though they have some proposals that are stricter than the states', a good start in some areas—but just a start. The draft rules simply do not overcome the handicap caused by rushing the rules forward without needed scientific studies. The rules do not protect from the risk of catastrophic harm from individual wells nor do they address the cumulative impacts of water withdrawal and well development; there is no method proposed to control the accumulated environmental toll that natural gas drilling, land transformation, and water depletion and pollution will take on habitats, streams, communities and the River.
- There are no spacing requirements for the tens of thousands of wells expected that would limit how many wells can be drilled and how close they can be to each other, facilitating an industrial landscape. Proposed Natural Gas Development Plan thresholds are too high—much gas development will not be captured and it is not clear how the plans will address individual and cumulative impacts. Allowing up to 5 well pads before the planning requirement is triggered will allow 50-60 gas wells to be installed by an operator, or more, without the plan component and allowing companies with up to a total of 3200 acres under lease to move ahead without plans will allow many operators to avoid plan requirements, especially with all the built-in waivers and exemptions—many thousands of wells will likely not be captured at all under the DRBC's Natural Gas Development Plans; further, how the DRBC will limit development of or prevent pollution from the projects that do fall under the natural gas development plan is not clear and how all these plans will be used to accomplish comprehensive planning or measurement of cumulative impacts is not even mentioned in the proposed rules. What will be the cumulative impacts, who will measure, and how will all the wells, including exploratory wells, be captured in any planning process? How will the loss of freshwater flows from the headwaters and the destruction of the now 89% forested Upper Delaware affect water quality, clean drinking water, habitats and ecology downstream?
- The draft rules do not place any restrictions on the chemicals that drillers can use to drill and hydraulically fracture ("frack") gas wells. Considering the hundreds of dangerous chemicals that are used, many of them carcinogenic and hazardous, and the fact that diesel fuel, a toxic substance, is being used in some areas to stimulate gas extraction, the DRBC's "hands off" approach to this central aspect which they could rightfully regulate is irresponsible. The DRBC proposes to ask for full disclosure of all fracking formulas, a good step, but the same cloak of secrecy for frackers will remain in place since the DRBC will honor companies' request for trade secrecy protection to shield frackers from public exposure. Why isn't the DRBC prohibiting the use of contaminants in gas extraction processes or at least waiting for the EPA to finish its study of hydraulic fracturing practices to protect drinking water? If the DRBC isn't going to publicly disclose the formulas themselves then why don't they prohibit the use of secret fracking chemicals?
- The draft rules do not prescribe wastewater standards for all of the specific constituents of gas drilling wastewater; under the draft rules the removal of all toxic substances won't happen. Many highly dangerous chemical hazards are in gas drilling wastewater and because of the federal exemption from disclosure, they are not all known. But hundreds are listed in NY's Draft Supplemental Generic Environmental Impact Statement and at the Endocrine Disruption Exchange. DRBC does propose a treatability study for waste fluids before a plant in the Basin can accept it and toxicity testing for treatment systems, which is not required by the States, and they list some of the hazardous chemicals regulated by safe drinking water rules that they want wastewater tested for but they allow for waivers, weakening the rule, employ a minimal Total Dissolved Solids standard, and have left off key parameters such as radionuclides and chemicals that are synergistically formed in the wastewater such as hydrogen sulfide and 4 Nitroquinoline 1-oxide (4NQO), one

of the most powerful carcinogens known. How can the DRBC move ahead without comprehensive control of this toxic wastewater?

- ✓ The draft rules rely on weak State regulations in many areas:
  - ❖ Due to a federal exemption under the Clean Water Act, stormwater management that's required for all other earth disturbance greater than an acre is not required for gas development and PA goes even further and exempts gas and oil activities from many key areas of stormwater, erosion and nonpoint source pollution control requirements. DRBC acquiesces entirely to the lack of requirements by deferring to state standards; this will ruin streams, smother habitats, kill fish and degrade water quality and drinking water. This gross oversight alone could violate the "no measureable change in water quality" standard that the DRBC is required to maintain in Special Protection Waters.
  - Drilling, cementing and casing construction and safety is totally sidestepped by the DRBC by deferring to state standards, despite Pennsylvania's substandard Chapter 78 requirements. The lack of adequate construction safety standards, in some cases even below industry standard, is causing pollution incidents, well blowouts, stray gas migration and more throughout Pennsylvania. How can the DRBC bury its head in the sand when it comes to safety? Isn't that what led to the BP Oil well disaster in the Gulf last year?
  - Air pollution from gas wells and wastewater impoundments is not addressed at all by the DRBC, despite PA's exemption of gas wells from air standards. NY's Draft Supplemental Generic Environmental Impact Statement identifies large amounts of hazardous air pollution (methanol) and other pollutants that will violate NY's air emission standards. In Texas <a href="http://www.edf.org/documents/9235">http://www.edf.org/documents/9235</a> Barnett Shale Report.pdf and other areas, gas extraction and production is degrading air and human health. Yet DRBC leaves this matter to the States, despite the fact that air pollution deposits on land and water, causing both air and water pollution far from the source.
  - The States have totally inadequate setbacks between gas well activities and water bodies, water wells, homes and other vulnerable features. Setbacks from homes, public buildings, public roads, public water supply wells and domestic water supply wells are all left out of DRBC oversight and relegated to inadequate state setbacks that have resulted in pollution incidents from gas drilling throughout Pennsylvania (most notably, US Environmental Protection Agency is investigating water well pollution in Dimock and Bradford County, PA). DRBC proposes a 500 foot setback of gas well pads from water bodies, wetlands, surface water supply intakes and water supply reservoirs and prohibits well pads in the DRBC's defined "floodway" and advises none in the "flood hazard area" (a variance may be granted), which is stricter than PA or NY requirements. Nonetheless, more protective requirements are needed.

All setbacks should be measured from the end of the horizontal well bore, as well as from the vertical well bore, since hydraulic fracturing will introduce contaminants and cause fracturing throughout the horizontal bore zone. Setbacks should be based on a minimum 300 foot buffer beyond the floodplain/flood hazard area as defined by riparian soils (when that distance is greater than 500 feet) to assure adequate protection for streams and to prevent flood damages. Water supply intakes and reservoirs need protection based on drainage patterns and the condition of the setback area (such as slope and vegetation) in order to provide needed buffering so distances need to be calculated on a site by site basis, not a cookie cutter 500 foot radius.

It must be said that setbacks, in and of themselves, do not provide protection from pollution release from gas wells. The example of Dimock, PA also illustrates that fact. Nine square miles of aquifer was polluted from a methane excursion from one well. The methane gas may have migrated according to PADEP during the drilling of the vertical well bore, which even more plainly shows that methane and other light fast traveling pollutants can quickly move from a gas well to pollute large areas of an aquifer, especially if the aquifer is not confined. While setbacks are a key preventive safeguard, regulation of construction, drilling and completion practices of the well bore must also be addressed by the DRBC by regulation.

- ❖ DRBC expressly allows centralized wastewater storage facilities and defers to State standards for them. In NY's Draft Supplemental Generic Environmental Impact Statement, impoundments as large as 40 acres are anticipated and operators are building huge impoundments in Pennsylvania now. One of the major sources of air pollution is from these wastewater impoundments, from which toxic contaminants volatilize to the air, then are breathed in or deposited on soil and water, causing highly mobile pollution. Further, DRBC proposes no setback requirements for impoundments, deferring to the states. For on-site pits up to 250,000 gallons, PA's setbacks are the same as for gas wells, which is only 100 feet from a water body, as close as 20 inches above the seasonal high water table and no mention of a setback from a water supply well. How can the DRBC allow centralized pits to hold gas drilling wastewater when they don't allow open pits for wastewater on well sites?
- The rules would allow for fast track approvals (Approval by Rule) with streamlined Executive Director review and without public input for much gas drilling and some water withdrawals. This loophole will lead to the "death by a thousand cuts". Speeding up gas development has led to communities and the environment suffering huge numbers of violations on well sites. 2,755 natural gas wells were drilled in PA in 2010; in the same timeframe, 2,486 violations were noted by PADEP. How can DRBC allow this breakneck speed when charged to maintain the River's exceptional quality?
- ✓ In the absence of a cumulative impact study, all stream data for all parameters including water chemistry (real time and grab samples), benthics, fish, mussels, must be commenced at least one full year before drilling can begin and the cost of this work must be borne by the drillers. Stream sampling must be established around the entire drilling zone beyond the vertical well pad and must also include reference site monitoring.
- The public opportunity in the rulemaking is inadequate and more hearings and a longer comment period is needed to provide adequate time to review & digest the proposed rules; the public needs to be involved. Expanding the opportunity for the public to participate is absolutely essential in order to make this a meaningful rulemaking process. The public is actively engaged and has shown deep interest on this issue more than 8000 letters in 8 months last year; thousands more letters are being submitted now calling for extension of the comment period and more hearings; six PA Delaware Valley legislators just sent letters to you, NYC and Philadelphia City Councils passed resolutions, Congressmen Maurice Hinchey (NY) and Rush Holt (NJ), and Mayor Michael Bloomberg (NYC) have sent letters asking for you to wait for the science, and hundreds of people are speaking up at meetings and hearings. DRBC needs to extend the public comment period and hold Hearings in New York City, Philadelphia, and more Hearings close to where people live.

To learn more about what the rules do and do not say, go to DRN's Workshop "Translating the DRBC Draft Gas Rules" and hear several experts discuss the issues at <a href="http://www.delawareriverkeeper.org/about/event.aspx?ld=89">http://www.delawareriverkeeper.org/about/event.aspx?ld=89</a>

## COMMENTS ARE DUE FRIDAY, APRIL 15, 2011.

Email comments directly to: <a href="http://parkplanning.nps.gov/projectHome.cfm?projectId=33467">http://parkplanning.nps.gov/projectHome.cfm?projectId=33467</a>
Or you can write a letter and mail it in or sign the sample letter attached and we'll deliver it to the DRBC for you.

THANK YOU for taking action on this crucial rulemaking. Please share this information with others and encourage your neighbors and friends to also weigh in.

To learn more about gas drilling go to: www.delawareriverkeeper.org

WE CANNOT SACRIFICE OUR WATER FOR GAS!

Commission Secretary, Delaware River Basin Commission P.O. Box 7360, 25 State Police Drive West Trenton, NJ 08628-0360

Re: Natural Gas Development Regulations - DRAFT

The Delaware River Basin Commission (DRBC) is charged with a legal mandate to "Do No Harm" to the Special Protection Waters of the Delaware River. You are required to maintain the exceptional water quality that now exists in the River and improve it where it needs help; 15 million people who get their drinking water from the Delaware River are relying on you. These draft rules fall far short of meeting that high bar. The draft rules simply do not overcome the handicap caused by rushing the rules forward without needed scientific studies. The rules do not protect from the risk of catastrophic harm from individual wells nor do they address the cumulative impacts of water withdrawal and well development; there is no method proposed to control the accumulated environmental toll that natural gas drilling, land transformation, and water depletion and pollution will take on habitats, streams, communities and the River. I am concerned about my drinking water, the Wild and Scenic Delaware, and the future of the Watershed. Some of my specific concerns about the draft rules are:

- No limits on how many wells can be drilled and how closely they can be spaced from each other; this means the drillers are in control
  of how intensely the Watershed is developed (they are serving their bottom line), not the DRBC (who is charged with protecting water
  resources).
- Much gas well development will occur without the planning you require for more than 5 well pads or companies who have leaseholdings of 3200 acres or more. At 10-12 wells per pad, 50 to 60 gas wells can be drilled without any plan oversight and variances, exemptions and limited expansions could make matters worse. Even where natural gas development plans are required, it is not clear how the planning will limit adverse environmental impacts nor is it clear how cumulative analyses can be made from these plans to avoid large scale degradation.
- You do not restrict the dangerous chemicals that will be used in drilling and hydraulic fracturing. You require operators to tell you
  what they are using on site and to do some sampling, but you do not guarantee public disclosure of all of the chemicals they will use
  and you do not propose to remove all of these chemicals in wastewater treatment. Some carcinogens you are not even testing for.
  You should consult TEDX at <a href="http://www.endocrinedisruption.com/chemicals.multistate.php">http://www.endocrinedisruption.com/chemicals.multistate.php</a>
- You propose to protect flood hazard areas BUT you allow variances so that only floodways, the stream area that carries the bulk of floodwater, are clearly off limits.
- You acquiesce to the States in many crucial areas that fatally flaw this rulemaking. These include:
- stormwater management (PA and federal government largely exempts gas well development);
- stream protection (PA exempts gas drilling from Exceptional Value and High Quality stream buffer standards—the best of the best streams in PA);
- drilling, cementing and well construction (PA's Chapter 78 is largely substandard in safety);
- air quality (PA exempts gas wells from air pollution standards);
- setbacks from homes, public buildings, roads, and public and private water supply wells are all deferred to state standards (PA and NY have minimal, inadequate setback standards);
- DRBC and the States measure setbacks from the well pad, not the horizontal well bore (where pollution can occur);
- centralized wastewater impoundments are allowed and left to state regulations despite your finding that open waste pits on well sites
  are too dangerous and require closed tank systems to capture all flowback.
- Approval by Rule will allow fast track approval of gas drilling and some water withdrawals, with no opportunity for public comment
  and input. Why does DRBC want to allow a rush to drill when less oversight has led to pollution and accidents throughout the
  Marcellus shale fairway (PA 2010 violations=2,486; wells drilled in 2010=2,755)?
- We need more time to participate in the rulemaking process. DRBC needs to extend the public comment period by at least another 120 days and hold Hearings in New York City, Philadelphia, and more Hearings close to where people live in PA. We care deeply about our future and the health of the Delaware River. Please let us take part in this historic rulemaking that will shape the future of our River and Watershed by expanding the public comment opportunities.

Thank you for the opportunity to comment on this crucial rulemaking. I ask that, after the rulemaking closes, you hold the rules in abeyance until the scientific studies are done so that information can inform regulations that will prevent pollution and avoid degradation. Aquifer and water resource pollution and depletion lasts hundreds of years and cannot ever be fully cleaned up. Doesn't it make sense to take a little time to make the right decisions now, before rushing ahead?

Signature	Print Name
Address	Email